



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,980	02/18/2004	Paul A. Luciw	309J-000910US	1033
22798 7590 02/09/2007 QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C. P O BOX 458 ALAMEDA, CA 94501			EXAMINER VENC, DAVID J	
			ART UNIT	PAPER NUMBER
			1641	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/09/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/781,980	LUCIW ET AL.	
	Examiner	Art Unit	
	David J. Venci	1641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on November 24, 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-42,64-83 and 109-126 is/are pending in the application.
- 4a) Of the above claim(s) 1-42,71,77,115 and 120 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 64-70,72-76,78-83,109-114,116-119 and 121-126 is/are rejected.
- 7) ☒ Claim(s) 65 and 111 is/are objected to.
- 8) ☒ Claim(s) 1-42,64-83 and 109-126 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on February 18, 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>06/02/05; 12/03/04</u> . | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1641

## DETAILED ACTION

### *Election/Restrictions*

Examiner acknowledges Applicants' election of Invention III, claims 64-83 and 109-126, without traverse in the reply filed November 24, 2006. In addition, Examiner acknowledges Applicants' election of species "phosphorylation" post-translational modification (see PTOL-413, Interview Summary), and species 2(c) and 3(c):

Claims 1-42, 71, 77, 115 and 120<sup>1</sup> are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to non-elected Inventions or non-elected species, there being no allowable generic or linking claim. In addition, Applicants indicate that claims 77 and 120 are withdrawn from further consideration

Currently, claims 64-70, 72-76, 78-83, 109-114, 116-119 and 121-126 are under examination.

### *Claim Objections*

Claims 65 and 111 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Specifically, claims 65 and 111 capture reagent specificity = "one" is implicit in respective base claims 64 and 110.

Applicants are required to cancel or amend the claims into proper dependent form, or rewrite the claims in independent form.

---

<sup>1</sup> Claims 77 and 120 apparently do not read on the elected species (see Applicants' reply filed November 24, 2006, p. 2, third full paragraph).

Art Unit: 1641

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 64-70, 72-76, 78-83, 109-114, 116-119 and 121-126 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 64:

The term "a plurality" as in "a *plurality* of proteins" is indefinite. Whether said "plurality" references an ordinal AND/OR/XOR class descriptor is not clear.

The phrase "a plurality of proteins[...] suspected of comprising" lacks antecedent basis. The identity of one or more objects, or lack thereof, required for cognition of "a plurality of proteins[...] suspected of comprising" is not clear.

The phrase "the first detection reagent providing" is indefinite. Whether/how inanimate "reagent" is capable of performing "providing" is not clear. The identity of one or more objects required for "providing" is not clear.

In claim 68, the phrase "the proteins" lacks antecedent basis.

In claim 109:

The phrase "first detection reagent capable of providing" is indefinite. Whether/how inanimate "reagent" is capable of performing "providing" is not clear. The identity of one or more objects required for "providing" is not clear.

Art Unit: 1641

The phrase "packaged in one or more containers" is indefinite. The identity of one or more objects referenced by "packaged" is not clear.

In claims 110-112, the phrase "the proteins" lacks antecedent basis.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 64-70, 72-75, 79-83, 109-114, 116-118 and 122-126 are rejected under 35 U.S.C. 102(b) as being anticipated by Fields & Song (US 5,283,173).

Fields & Song describe a composition (see col. 6, line 46, "the culture") comprising:

1. a plurality of subsets of particles (see *e.g.*, col. 6, line 45, "cells"; see *also*, col. 7, line 48, "double transformants"), the particles in each subset:
  - a. comprising a capture reagent (see *e.g.*, col. 4, line 39, "first hybrid protein"; see *also*, line 53, "second hybrid protein") specific for at least one of a plurality of proteins (see *e.g.*, line 53, "second hybrid protein"; see *also*, col. 4, line 39, "first hybrid protein") comprising a first post-translational modification (see col. 3, line 65, "kinases"), and
  - b. being distinguishable from those of every other subset (see *e.g.*, col. 3, lines 46-50, "a library of plasmids can be constructed which may include, for example, total mammalian complementary DNA (cDNA)"); and
2. a single first detection reagent (see *e.g.*, col. 4, line 29, "detectable protein"), the first detection reagent providing an indication of the presence of the first post-translational modification.

Art Unit: 1641

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 76, 78, 119 and 121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fields & Song (US 5,283,173) in view of Alberta & Segal, CURRENT PROTOCOLS IN NEUROSCIENCE, Unit 3.14, John Wiley & Sons (1998).

Fields & Song describe a composition as substantially described, *supra*, and incorporated herein.

Fields & Song do not teach a detection reagent "antibody specific for a phosphorylated tyrosine, serine or threonine residue" or a detection reagent comprising a "fluorescent label".

However, Alberta & Segal teach the aforementioned detection reagents (see p. 3.14.11, "Basic Protocol 4", *Materials*, "Primary antibody: purified rabbit[...] Secondary antibody—fluorophore") (paraphrasing mine) for investigating phosphorylation pathways (see Title), specifically, receptor activation (see p. 3.14.15, right column, last paragraph, first sentence).

It would have been obvious for a person of ordinary skill to spike compositions in Fields & Song with detection reagent "antibody specific for a phosphorylated tyrosine, serine or threonine residue" or a detection reagent comprising a "fluorescent label" because Alberta & Segal reiterate the importance of acquiring graphic visual (*i.e.*, physiologically relevant) evidence of protein function (see p. 3.14.18, left column, first full paragraph, last sentence).

Art Unit: 1641


**Conclusion**

No claims are allowable at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Venci whose telephone number is 571-272-2879. The examiner can normally be reached on 08:00 - 16:30 (EST). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

David J Venci  
Examiner  
Art Unit 1641

djv

  
LONG V. LE *or/so/so*  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600